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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,977	07/14/2000	Aviad Zlotnick	6727/OH417	7345

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Darby & Darby P C  
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EXAMINER

SCHLAIFER, JONATHAN D

ART UNIT PAPER NUMBER

2178

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>09/616,977</p>	<p><b>Applicant(s)</b></p> <p>ZLOTNICK, AVIAD</p>	
	<p><b>Examiner</b></p> <p>Jonathan D. Schlaifer</p>	<p><b>Art Unit</b></p> <p>2178</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-19 and 22-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-19 and 22-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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### DETAILED ACTION

1. This action is responsive to amendment to application 09/616,977 filed on 1/18/2005.
2. Claims 1, 4-19, and 22-37 are pending in the case. Claims 2-3 and 20-21 have been canceled. Claims 1, 19, and 35 have been amended. Claims 1, 12, 19, 30, 35, and 37 are independent claims.
3. The rejections of claims 1, 4-19 and 22-37 under 35 U.S.C. 103(a) have been withdrawn as necessitated by amendment.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 4-7, 10-11, 19-20, 22-25 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti et al. (USPN 5,625,721—filing date 4/6/1994), hereinafter Lopresti, further in view of Motoiwa (USPN 6,343,149 B1—filing date 5/7/1999), further in view of Walker et al. (USPN 6,381,582 B1—filing date 9/29/1997), hereinafter Walker.**
5. **Regarding independent claim 1, Lopresti discloses a method for processing a document including a field containing information in a predefined domain (Lopresti discloses in the Abstract that the invention applies OCR to fields), defining a directory of data relating to the predefined domain (in col. 2, lines 24-40, the OCR is checked via dictionary),**

processing the image code the information, and looking up the coded information directory so as to check whether the information is coded correctly (in col. 2, lines 24-40, the OCR is checked via dictionary). Lopresti fails to disclose receiving a client via a computer network images of a number of fields contain the information. However, Motoiwa discloses receiving from a client via a computer network an image of the field containing the information in col. 5, lines 45-67 and col. 6, lines 1-20, in order to facilitate information access on a remote basis. It was notoriously well known in the art at the time of the invention that useful processes could be repeated, leading to the use of images of a number of fields containing respective information. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used Lopresti's invention in combination with a network in order to have facilitated information access on a remote basis. Lopresti fails to disclose a method comprising returning the checked, coded information over the network to the client. However, Motoiwa discloses receiving from a client via a computer network an image of the field containing the information in col. 5, lines 45-67 and col. 6, lines 1-20, in order to facilitate information access on a remote basis. It was notoriously well known in the art at the time of the invention that processed information was often returned to clients to make information directly available to users. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a network to return information to the client because this would have made information directly available to users. Lopresti and Motoiwa fail to disclose a method wherein receiving the image of the field comprises receiving a number of fields filled in with respective information, regarding

which the checked, coded information is return to the client, and comprising receiving payment from the client according to the number of fields. However, Walker discloses in col. 12, lines 20-50, a database has a set price per field and the total number of fields determines the total price. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Walker's pricing scheme with Lopresti and Motoiwa's invention because it is a logical and efficient means of billing a customer.

6. **Regarding dependent claim 4**, Lopresti, as noted in col. 2, lines 24-40, discloses checking the OCR results with a dictionary. It was notoriously well known in the art at the time of the invention that checking OCR results requires selecting a dictionary that corresponds with the results to be checked (i.e. appropriate language, etc.) in order to obtain maximum accuracy. It would have been obvious to one of ordinary skill in the art at the time of the invention to select data specific to the predefined domain from one or more general databases in order to obtain maximum accuracy.
7. **Regarding dependent claim 5**, Lopresti is receiving data to be processed for OCR recognition, which inherently implies receiving an image of alphanumeric characters in the fields.
8. **Regarding dependent claim 6**, Lopresti discloses in col. 5, lines 10-25 the use of marked text blocks to delineate regions for OCR. This constitutes a method wherein the document includes a template delineating the fields, and where receiving the image of the characters comprises receiving the image of the characters filled in to the fields and remaining after drop-out of the template from the image of the fields.

9. **Regarding dependent claim 7**, Lopresti's invention is receiving data to be processed for OCR recognition (see Abstract).
10. **Regarding dependent claim 10**, in col. 2, lines 24-40 of Lopresti, the OCR is checked and corrected via dictionary.
11. **Regarding dependent claim 11**, in col. 2, lines 24-40 of Lopresti, the OCR is checked and corrected via dictionary.
12. **Regarding independent claim 19**, it is an apparatus for processing a document that performs the method of claim 1, and is rejected under similar rationale.
13. **Regarding dependent claim 20**, it is an apparatus for processing a document that performs the method of claim 2, and is rejected under similar rationale.
14. **Regarding dependent claim 22**, it is an apparatus for processing a document that performs the method of claim 4, and is rejected under similar rationale.
15. **Regarding dependent claim 23**, it is an apparatus for processing a document that performs the method of claim 5, and is rejected under similar rationale.
16. **Regarding dependent claim 24**, it is an apparatus for processing a document that performs the method of claim 6, and is rejected under similar rationale.
17. **Regarding dependent claim 25**, it is an apparatus for processing a document that performs the method of claim 7, and is rejected under similar rationale.
18. **Regarding dependent claim 28**, it is an apparatus for processing a document that performs the method of claim 10, and is rejected under similar rationale.
19. **Regarding dependent claim 29**, it is an apparatus for processing a document that performs the method of claim 11, and is rejected under similar rationale.

- 20. Claims 8 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti, further in view of Motoiwa, further in view of Walker, further in view of Bradford (USPN 5,805,747—filing date 1/13/1997)**
- 21. Regarding dependent claim 8,** Lopresti, Motoiwa, and Walker fail to disclose a method wherein looking up the coded information comprises selecting a preferred reading of the characters from among two or more possible readings generated by the OCR, responsive to the data in the directory. However, Bradford discloses the use of multiple OCR readings in order to increase OCR accuracy. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Lopresti, Motoiwa, and Walker's inventions in conjunction with Bradford's in order to increase OCR accuracy.
- 22. Regarding dependent claim 26,** it is an apparatus for processing a document that performs the method of claim 8, and is rejected under similar rationale.
- 23. Claims 9 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti, further in view of Motoiwa, further in view of Walker, further in view of Medina (USPN 5,889,897—filing date 4/8/1997)**
- 24. Regarding dependent claim 9,** Lopresti, Motoiwa, and Walker fail to disclose a method wherein looking up the coded information comprises generating a confidence score, and wherein processing the images comprises passing the images to a human operator for coding when the confidence score is below a predetermined threshold. However, Medina, in col. 3, lines 60-67 and col. 4, lines 1-14 describes how confidence scores are generated and human correction is used as a backup in order to maximize accuracy of the OCR data. It would have been obvious to one of ordinary skill in the art at the time of

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the invention to use Medina's method of correcting the OCR data from Lopresti, Motoiwa, and Walker in order to maximize accuracy of the OCR data.

25. **Regarding dependent claim 27**, it is an apparatus for processing a document that performs the method of claim 9, and is rejected under similar rationale.
26. **Claims 12-18 and 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lopresti, further in view of Motoiwa, further in view of Walker, further in view of Brown (USPN 6,498,612 B1—filing date 9/22/1998).**
27. **Regarding independent claim 12**, it is a method for processing forms that is analogous to the document processing method of claim 1, and is rejected under similar rationale. However, one limitation that differentiates claim 12 that is not disclosed in Lopresti, Motoiwa, or Walker, is the limitation of defining a directory of data relating to the predefined domain by selecting data specific to the domain from one or more general databases. However, this limitation is disclosed in Brown in col. 6, lines 35-55. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Brown's innovation of the data directory with Lopresti, Motoiwa, and Walker because it makes it easier to find information (see col. 6, lines 39-40).
28. **Regarding dependent claim 13**, it was notoriously well known in the art at the time of the invention that checking whether a set of information is correct requires checking whether its parts are correct, in order to assure accuracy. It would have been obvious to one of ordinary skill in the art at the time of the invention to verify the coded information, because it would have been a necessary part of ensuring the accuracy of the information as a whole.



29. **Regarding dependent claim 14**, Lopresti's invention is receiving data to be processed for OCR recognition (see Abstract).
30. **Regarding dependent claim 15**, Lopresti discloses performing OCR (see Abstract) and a dictionary lookup in col. 2, lines 24-40, which satisfy the limitations of the claim.
31. **Regarding dependent claim 16**, it is a method for processing forms that is analogous to the document processing method of claim 2, and is rejected under similar rationale.
32. **Regarding dependent claim 17**, Lopresti and Motoiwa fail to disclose receiving payment from the client according to a number of the forms for which the correctness of the information in the field was checked. However, in col. 3, lines 30-35 of Walker, the validation of the fields requires that the fields tabulated be valid fields by scanning codes. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the fields be checked for validity because it would help to verify the accuracy of the data being manipulated.
33. **Regarding dependent claim 18**, it is a method for processing forms that is analogous to the document processing method of claim 11, and is rejected under similar rationale.
34. **Regarding independent claim 30**, it is a forms processing apparatus that performs the method of claim 12, and is rejected under similar rationale.
35. **Regarding dependent claim 31**, it is a forms processing apparatus that performs the method of claim 13, and is rejected under similar rationale.
36. **Regarding dependent claim 32**, it is a forms processing apparatus that performs the method of claim 15, and is rejected under similar rationale.

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37. **Regarding dependent claim 33**, it is a forms processing apparatus that performs the method of claim 16, and is rejected under similar rationale.
38. **Regarding dependent claim 34**, it is a forms processing apparatus that performs the method of claim 18, and is rejected under similar rationale.
39. **Regarding independent claim 35**, it is a computer software product on a computer readable medium that encodes the method of claim 1, and is rejected under similar rationale.
40. **Regarding independent claim 36**, it is a computer software product on a computer readable medium that encodes the method of claim 14, and is rejected under similar rationale.
41. **Regarding independent claim 37**, it is a computer software product on a computer readable medium that encodes the method of claim 12, and is rejected under similar rationale.

***Response to Arguments***

42. Applicant's arguments filed 1/18/2005 have been fully considered but they are not persuasive.
43. Applicant alleges that Lopresti teaches against dictionary lookup. The Examiner's response is that regardless of whether or not Lopresti used this technique in Lopresti's invention, the technique was known in the art at the time of the invention.
44. Applicant's arguments with respect to claims 1, 4-19, and 22-37 with respect to Sultan have been considered but are moot in view of the new ground(s) of rejection.

45. Applicant argues that Brown is insufficient to match the claim's description of specific domains. However, the Examiner points out that whenever specific information is retrieved from a database, it forms a unique subdomain of the database and Brown in conjunction with the other art provides this scenario.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 6,055,516 (filing date 1/20/1999)—Johnson et al.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan D. Schlaifer whose telephone number is (571) 272-4129. The examiner can normally be reached on 8:30-5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JS

  
**STEPHEN HONG**  
**SUPERVISORY PATENT EXAMINER**